



**MAINE PUBLIC UTILITIES COMMISSION  
FACILITY EVALUATION REPORT FOR LIQUIFIED PETROLEUM GAS SYSTEMS**

Date: \_\_\_\_\_

Facility ID #: \_\_\_\_\_

Inspection Unit #: \_\_\_\_\_

Date of Last Inspection: \_\_\_\_\_

State Inspector: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip \_\_\_\_\_

Location: \_\_\_\_\_ Longitude: \_\_\_\_\_ Latitude: \_\_\_\_\_

Installation Date of Original System: \_\_\_\_\_

Number of Services: Existing: \_\_\_\_\_ Active: \_\_\_\_\_

Public Place: Yes: \_\_\_\_ No: \_\_\_\_ Storage Capacity (gals): \_\_\_\_\_

Facility Operator: \_\_\_\_\_

Operator's Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip \_\_\_\_\_

Phone No. \_\_\_\_\_ FAX: \_\_\_\_\_

Operator's Rep: \_\_\_\_\_ Title: \_\_\_\_\_

Facility Owner: \_\_\_\_\_

Owner's Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip \_\_\_\_\_

Phone No. \_\_\_\_\_ FAX: \_\_\_\_\_

**MAINE PUBLIC UTILITIES COMMISSION  
FACILITY EVALUATION REPORT FOR LIQUIFIED PETROLEUM GAS SYSTEMS**

<b>ANSI/NFPA Section</b>	<b>ANSI/NFPA 58 REQUIREMENTS</b>	<b>S*</b>	<b>U*</b>	<b>N/A*</b>
	<b>General</b>			
1-3.2	Is the presence of odorant determined by sniff testing or other means and the results documented: (a) Whenever LP-Gas is delivered to a bulk plant? (b) When shipments of LP-Gas bypass the bulk plant?			
	What else does the operator do to ensure that gas in the system is odorized?			
1-4.1	Are plans for fixed installations utilizing storage containers over 2000 gallon individual water capacity, or with an aggregate water capacity exceeding 4000 gallon, submitted to the authority having jurisdiction before installation is started?			
2-3.7	Are valves accessible?			
	If higher than six feet above the ground is a ladder permanently fixed to the tank or can valve be operated remotely from a point 6 feet or less from the ground?			
	Are pressure relief valve and regulator vents mounted above the normal high water mark?			
	On an underground tank does the dome or manhole cover have opening/s equal to the discharge area of relief valve and regulator vent?			
2-4.5.1	Are all valves used in piping systems made of steel, ductile iron, malleable iron, or brass?			
2-4.5.2	Are all valves suitable for the appropriate working pressure?			
2-5.1.2	Is all equipment such as pumps, compressors, vaporizers, strainers, suitable for the appropriate working pressures?			
2-4.7	Are hydrostatic relief valves being used when liquid can be trapped between two valves in the liquid piping?			
	Are hydrostatic relief valve discharge settings no less than 400 psi or more than 500psi?			
	<b>Piping</b>			
3-2.8.2	Is piping used for pressures up to 125 psi designed for 125 psi or greater?			
	Is piping used for piping greater than 125 psi up to 250 psi designed for 250 psi or greater?			
	Is piping used for pressures greater than tank pressure, (such as the discharge side of a pump, or is used where hydrostatic relief valves are needed), designed for 350 psi or greater?			
2-4.1.3	Is pipe or tubing (steel, copper, or plastic of a suitable material for the purpose it is being used for?			
2-4.4	Are fittings for pipe and tubing of a suitable material they are being used for?			
3-2.7	Is polyethylene pipe installed outdoors and below the ground?			
	Is there no more than 20 psi being piped into any buildings?			
	Is the vapor pressure in polyethylene piping system 30 psi or less?			
3-2.8.3	If the pressure in threaded piping is in excess of 125 psi, is schedule 80 pipe being used or if the pressure is 125 psi or less is schedule 40 pipe being used?			
	If the pipe is welded is schedule 40 pipe or greater being used?			
	If the pipe is brazed is the melting point of the brazing material at least 1000 deg. F?			

\* S=Satisfactory; U=Unsatisfactory; N/A=Not Applicable

. Unless otherwise noted, all code references are to NFPA 58 (1995 Edition).

ANSI/NFPA Section	ANSI/NFPA 58 REQUIREMENTS	S*	U*	N/A*
	<b>Piping (Cont'd)</b>			
3-2.8.5	Is tank pressure manifold piping designed so that the LP condensate goes back to the tank?			
	Is there no non-metallic pipe, tubing, or hose used in the piping system?			
3-2.8.7	Is the above ground piping supported properly?			
	Is the piping protected against physical damage?			
	Is the polyethylene pipe buried at least eighteen inches (this may be reduced to twelve inches if external damage is unlikely or less if conduit or shielding is used)?			
	In a polyethylene system is there an anode- less riser that connects the underground piping to the above ground piping?			
	Does the horizontal section of the riser have at least twelve inches of cover?			
3-2.8.8	Is the underground steel piping protected against corrosion?			
	<b>Regulators &amp; Pressure Relief Devices</b>			
3-2.6.1	Is the system a two-stage system or has a two- stage integral regulator?			
	If a high-pressure regulator is used is there a first stage regulator between it and the second stage regulator? or			
	If a high-pressure regulator is used and rated for a capacity of over 500,000 Btu/hr is there over pressure protection for both the high-pressure regulator and the second stage regulators?			
3-2.6.3	Is the first stage or high-pressure regulator installed outside?			
3-2.6.4	Is the regulator set-up designed against freezing rain, sleet, snow, ice, mud or debris (integrally or otherwise)?			
3-2.6.5	Is the regulators relief vent installed at least three feet horizontally from any building opening that is below the discharge of the vent?			
	Is the point of discharge at least five feet away from any source of ignition, direct vent appliance, or mechanical ventilation air intake?			
§ 3-2.6.6	Is the vent of a regulator that is installed inside of a building piped to the outside and does the vent location meet the requirements of 3-2.6.5?			
	<b>Tanks</b>			
2-2.1.5	Are containers showing serious denting, bulging, gouging, or excessive corrosion removed from service?			
2-2.1.7	Do repairs or alterations of containers comply with the regulations, rules, or code under which the container was fabricated?			
2-2.1.8	Containers for general use shall not have individual water capacities greater than 120,000 gal.			
2-2.1.9	Are heating or cooling coils installed inside tanks?			
2-2.2.2	Is the minimum design pressure for ASME containers in accordance with Table 2-2.2.2? (Attachment No. 1)			
2-2.3.2	Are containers of more than 30 gal and less than 2000 gal water capacity designed to be filled volumetrically? (a) are containers manufactured after December 1, 1963, equipped for filling into vapor space?			
2-2.3.3	Are containers that are greater than 125 gal water capacity and manufactured after July 1, 1961, provided with a ¾" or larger connection for liquid evacuation?			

\* S=Satisfactory; U=Unsatisfactory; N/A=Not Applicable  
 . . Unless otherwise noted, all code references are to NFPA 58 (1995 Edition).

ANSI/NFPA Section	ANSI/NFPA 58 REQUIREMENTS	S*	U*	N/A*
	<b>Tanks (Cont'd)</b>			
2-3.4.1	Are fixed or variable liquid level gauges installed on all containers filed by volume and installed in accordance with this provision?			
3-2.4	Does the relief valve communicate with the vapor space of the tank?			
3-2.5.3	On underground tanks over 2000 gal. are relief valve stacks 7 feet above the top of the tank?			
3.2.2.2	On underground tanks 2000 gal. or under do the relief valves communicate with the outside?			
	Are containers installed the proper distance from important buildings or property that can be built on (in accordance with table 3-2.2.2)?			
3-2.2.5	For underground tanks, is the separation between tanks at least three feet or more?			
3-2.2.7	Is there loose combustible materials weeds, or tall dry grass within ten feet of the tank?			
3-2.2.10	Where tank floatation is a possibility, is the tank properly anchored?			
	Is any portion of an above ground container located within six feet of a vertical plane beneath overhead power lines that are over 600 volts nominal?			
	Is the ASME tank located at least ten feet from any source of ignition?			
3-2.4.1	Is the tank painted a light reflective color?			
3-2.4.2	If the tank is more than a 2000-gal tank, is it mounted on saddles that fit the contour of the tank?			
3-2.4.7	Does the saddle have a pad between it and the tank that prevents corrosion between the tank and the saddle?			
	If in areas of heavy snow, is the tank marked with a stake?			
	If the tank is mounded is there at least one foot of cover over the tank?			
3-2.4.8	Are valves and other appurtenances accessible without removing any of the tank cover?			
	Is the mounded tank protected against corrosion?			
	On an underground tank is, there at least six inches of cover?			
3-2.5.3	If subject to loading from vehicles, is there at least eighteen inches of cover (for a non-interchangeable tank or, if the tank is an interchangeable tank, then no more than twelve inches of cover) or is a concrete slab used to withstand the loads?			
	Is the tank housing, piping, etc. in the above scenario protected against traffic?			
	If the tank is installed within ten feet of traffic, is the tank housing, piping, etc. protected against vehicles?			
	Is the underground tank protected against corrosion?			
	Are rain caps provided for relief valves?			
2-2.3.4	Are containers larger than 2000 gal water capacity equipped with an opening for a pressure gauge?			
2-2.5.1	For horizontal containers above 2000 gal water capacity on a concrete foundation, is the total height of the outside bottom of the container above the concrete foundation less than 6 inches?			
2-2.5.2	A) For horizontal containers less than 2000 gal water capacity installed on concrete foundations raised above the ground level by more than 12 inches, is the bottom of the horizontal steel support not less than 2 inches, nor more than 12 inches, below the outside bottom of the container shell?			
	B) For installation on paved or concrete foundations within 4 inches of ground level, are the bottoms of the structural members no more than 24 inches below the outside bottom of the container shell?			

\* S=Satisfactory; U=Unsatisfactory; N/A=Not Applicable  
Unless otherwise noted, all code references are to NFPA 58 (1995 Edition).

ANSI/NFPA Section	ANSI/NFPA 58 REQUIREMENTS	S*	U*	N/A*
	<b>Tanks (Cont'd)</b>			
2-2.6.1	If one or more compressed gases are stored or used in the same areas as LP-Gas, are the containers marked "Flammable" and either "LP-Gas," "LPG," "Propane," or "Butane?"			
2-3.1.2	Are container appurtenances fabricated of materials suitable for LP-Gas service and resilient to the action of LP-Gas under service?			
2-3.1.3	Do container appurtenances have a rated working pressure of at least 250 psig?			
2-3.1.4	Are gaskets used in LP-Gas service resilient to the action of LP-Gas?			
	Are gaskets replaced when flanges are opened?			
2-3.2.1	Are containers equipped with one or more pressure relief devices designed to relieve vapor?			
2-3.2.4	A) Are pressure relief valves designed for sufficient relieving capacity with the requirements of appendix E?			
	B) Are pressure relief valves marked accordingly?			
	C) Are shut off valves eliminated between the container and pressure relief device?			
	D) Are pressure relief devices designed to minimize tampering?			
2-3.3.2	A) For containers less than 2000gal water capacity, are the required container appurtenances in accordance with Table 2-3.3.2(a)?			
	B) For containers over 2000 gal water capacity:			
	1) For vapor and liquid withdrawal openings:			
	a. A positive shut-off valve located as close to the tank as possible?			
	b. An internal valve with an integral excess flow valve or excess flow protection?			
	2) For vapor and liquid inlet openings:			
	a. A positive shut-off valve in combination with either a backflow check valve or excess flow valve?			
	b. An internal valve with an integral excess flow valve or excess flow protection?			
	3) Other container appurtenances:			
	a. An internal spring-type, flush-type full internal, or external pressure relief valve? (See Appendix A)			
	b. Fixed liquid level gauge?			
	c. Float gauge, rotary gauge, or slip tube gauge?			
	d. Pressure gauge?			
	e. Temperature gauge?			
	<b>Indirect-Fired &amp; Electric Vaporizers</b>			
3-6.2.2	Are vaporizers installed in a building?			
	Is the building built according to Chapter 7?			
	Are drains protected and relief valves piped to the outside?			
3-6.2.3	Is heat source gas and is it within 15 feet? (If yes see direct-fired vaporizers.)			
3-6.2.5	If gas-fired heat source, does it have safety shut off?			
	<b>Direct-Fired Vaporizers</b>			
3-6-3.2	If vaporizer is in a building is it built according to Chapter 7?			
3-6.3.3	Are all drains plugged and relief valves piped to the outside?			

\* S=Satisfactory; U=Unsatisfactory; N/A=Not Applicable

. Unless otherwise noted, all code references are to NFPA 58 (1995 Edition).

ANSI/NFPA Section	ANSI/NFPA 58 REQUIREMENTS	S*	U*	N/A*
	<b>Direct-Fired Vaporizers (Cont'd)</b>			
3-6.3.4	Are there shutoffs in gas lines before vaporizer?			
3-6.3.5	Is vaporizer 10 feet from container?			
	Is vaporizer 15 feet from container shutoffs?			
	Is vaporizer 15 feet from the point of transfer?			
	Is vaporizer 25 feet from nearest building or property line?			
	<b>Waterbath Vaporizers</b>			
3-6.6	If electrically heated, is all electrical equipment Class 1, Group D? (Treat as an indirect-fired vaporizer)			
	If not electrically heated, treat as direct-fired.			
<b>Part 192 Section</b>	<b>PART 192 REQUIREMENTS</b>			
	<b>Field Performance Review</b>			
.181	Valve Locations			
.463	Cathodic Protection			
.479	Pipeline Components Exposed to the Atmosphere			
.605(a) (8)	Knowledge of Operating Personnel			
.707	Line Markers			
.739(a) (c) (d)	Pressure limiting & regulating devices: (mechanical) (1yr/15 mo.)			
.743	Pressure limiting & regulating devices: (test) (1yr/15 mo.)			
.747	Valve Maintenance (test)			
.751	Warning Signs.			

\* S=Satisfactory; U=Unsatisfactory; N/A=Not Applicable  
 .Unless otherwise noted, all code references are to NFPA 58 (1995 Edition).